

AMENDMENT UNDER 37 C.F.R. § 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2125

REMARKS

Claims 1-36 remain in the case. The Office with the earlier objections and several of the rejections, but still finally rejected each of claims 1-36 on various grounds. More particularly, the Office:

- rejected claims 1-6, 23, and 25-29 as anticipated under 35 U.S.C. § 102 (b) U.S. Letters Patent 4,861,419 ("Flinchbaugh *et al.*"); and
- rejected claims 7-22, 24, and 30-36 as obvious at they time they were made under 35 U.S.C. § 103 (a) over Flinchbaugh *et al.* in combination with U.S. Letters Patent 5,576,629 ("Turner *et al.*").

Applicant maintains his traversal of each of these rejections.

In Flinchbaugh *et al.*, the Office Action relies primarily on the relationship and function of the computer 40, photodiode 36, and EPT recorder 38 in Figure 1. In essence, the Office alleges that the computer 40 is a "fault detection controller" and the photodiode 36 and EPT recorder 38 are "report generators" from which the "fault detection controller [requests] a report generator for the trace data report". However, Applicant respectfully submits that the Office continues to misconstrue Flinchbaugh *et al.* and that the rejections are *prima facie* deficient.

A. THE OFFICE MISCONSTRUES FLINCHBAUGH *ET AL.*

The functionality of the computer 40 is discussed quite extensively in Flinchbaugh *et al.*, most of which is cited by the Office. The functionality is summarized at col. 9, lines 3-34, which is cited by the Office and on which the Office heavily relies. However, extensive detail of the operation of the computer 40 is included in the discussion of FIG. 3 – FIG. 5, as well, which the Office also cites and on which the Office relies.

AMENDMENT UNDER 37 C.F.R. § 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2125

The EPT recorder 38 is discussed only at col. 8, lines 51-58, which read:

An electrical signal corresponding to the intensity of light impacting on photodiode 36 is generated by photodiode 36 and is communicated to an end point trace recorder 38. In a typical prior art plasma etch reactor, the end point trace recorder 38 provides a paper strip-chart record of the end point trace of the etching operation conducted in the reactor.

Note that there is no indication in this passage that the EPT recorder 38 communicates in any way with the computer 40. To the extent that one wishes to identify the "strip-chart record" as a report, there is no teaching that the report ever goes to the computer 40, much less a teaching that the EPT recorder 38 communicates it to the computer 40. Nor is there any teaching that the EPT recorder 38 communicates even the data to the computer 40.

The functionality of the photodiode 36 is discussed in about three places in Flinchbaugh *et al.* The first is in the passage quoted above, in which the data it generates is transmitted to the EPT recorder 38. The second is at col. 9, at lines 2-5, where Flinchbaugh *et al.* states that the photodiode 36 is "operably connected" to the computer 40. The third mention is in connection with the graph in FIG. 2. Nothing in any of these passages supports the Office's construction of the photodiode 36 as a "report generator." The photodiode 36 generates data, and not reports, as the Office even concedes in attempting to define the photodiode 36 as "...a report generator because it generates and supplies data in preparing an actual trace data [report]." The Office's position is internally contradictory, and therefore irrational. Even were this not true, the claims specify that the report contain "at least one of a parameter, a trigger, and a frequency for the trace data report", none of which the photodiode 36 generates.

Even were these misconstructions correct, the rejections still fail. The Office Action infers numerous limitations, including the transmission of a request between the computer 40 and

AMENDMENT UNDER 37 C.F.R. § 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2125

the EPT recorder 38 and/or the photodiode 36, from a few isolated teachings. In particular, the Office Action cites the teaching that:

Computer 40 functions in the embodiment of the present invention, among other things, to ...provide certain signals or controls to the plasma etcher or the operator of the equipment as well as other functions as desired.

col. 9, lines 5-18. The Office notes that the arrows in FIG. 1 indicate the computer 40 has "bi-directional communications." The Office furthermore relies on the programmed function of the computer 40 in "getting" the EPT and that it is allegedly well known to communicate through requests and responses.

B. THE OFFICE'S CONSTRUCTION OF FLINCHBAUGH *ET AL.* IS A HINDSIGHT RECONSTRUCTION

Applicant respectfully submits that the inferences the Office draws from these points results purely from hindsight reconstruction. For instance, Flinchbaugh *et al.* clearly states the photodiode 36 transmits its data to both the computer 40 (col. 9, lines 3-5) and the EPT recorder 38 (col. 9, lines 52-55), but nowhere indicates that the computer 40 transmits anything to either the photodiode 36 or the EPT recorder 38. Thus, the more reasonable interpretation of the arrows in FIG. 1 is that they indicate the transmission of data from the photodiode 36 to the computer 40 and the EPT recorder. The suggestion that they indicate the transmission of a request from the computer 40 to the photodiode 36, or the EPT recorder 38 can arise only from Applicant's disclosure. This is improper, and constitutes reversible error.

C. INHERENCY IS IMPROPERLY APPLIED IN ALL REJECTIONS

The Office Action also states that "...[i]t is from these points, both explicit and inherent that the Examiner contends that Flinchbaugh *et al.* [*sic*] does disclose a request between a fault

AMENDMENT UNDER 37 C.F.R. § 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2125

detection controller and a report generator." Thus, both the anticipation and the obvious rejections rely on inherent teachings of Flinchbaugh *et al.* Inherency works differently in anticipation and in obviousness contexts, but it is misapplied here regardless of the grounds for rejection.

Inherency is immaterial in an obviousness analysis. Inherency and obviousness are not synonymous since "[t]hat which may be inherent is not necessarily known. Obviousness cannot be predicated on what is unknown." *Newell*, at 1250, quoting *In re Spormann*, 150 U.S.P.Q. (BNA) 449, 452 (C.C.P.A. 1966); *In re Rijckaert*, 28 U.S.P.Q.2d (BNA) 1955, 1957 (Fed. Cir. 1993), also quoting *Sporman*, at 452. "[O]ne cannot choose from the unknown." *In re Ochial*, 37 U.S.P.Q.2d (BNA) 1127, 1131 (Fed. Cir. 1995), quoting *In re Mancy*, 182 U.S.P.Q. (BNA) 303, 306 (C.C.P.A. 1974). "Such a retrospective view of inherency is not a substitute for some teaching or suggestion supporting an obviousness rejection." *Rijckaert*, at 1957. Thus, to the extent the obviousness rejections are predicated on supposedly inherent teachings of Flinchbaugh *et al.*, they are improper and should be withdrawn.

Inherency in anticipation requires that the asserted proposition *necessarily* flow from the disclosure. *In re Oelrich*, 212 U.S.P.Q. (BNA) 323, 326 (C.C.P.A. 1981). "The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Oelrich*, at 326, quoting *Hansgirtg v. Kemmer*, 40 U.S.P.Q. (BNA) 665, 667 (C.C.P.A. 1939). "Inherency... may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Ex parte Skinner*, 2 U.S.P.Q.2d (BNA) 1788, 1789 (Bd. Pat. App. & Int. 1987), citing *In re Oelrich*, 666 F.2d 578, 581 (C.C.P.A. 1981).

Even if the Office's construction of Flinchbaugh *et al.* were justifiable, which Applicant disputes, it is not the only supportable interpretation. As Applicant noted above, all the teachings

AMENDMENT UNDER 37 C.F.R. § 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2125

relied on by the Office also support the more reasonable construction of Flinchbaugh *et al.* that Applicant propounds. Namely, that Flinchbaugh *et al.* teaches:

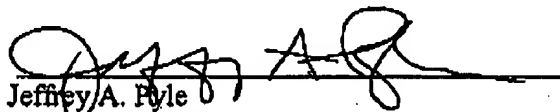
- a photodiode 36 that outputs data to both the EPT recorder 38 and the computer 40;
- an EPT recorder 38 that receives the data from the photodiode 36 and prints out a "strip-chart record"; and
- a computer 40 that receives the data from the photodiode 36 and analyzes it.

Note that this construction omits several of the limitations of Applicant's claims. Nevertheless, since this construction is at least as probably as that proffered by the Office, if not more so, then the Office's construction does not "necessarily flow" from Flinchbaugh *et al.* It therefore is not "inherent" in what Flinchbaugh *et al.* teaches.

Accordingly, Applicant respectfully submits once again that the application is in condition for allowance and requests that it be allowed to issue.

The Examiner is invited to contact the undersigned attorney at (713) 934-4053 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,


Jeffrey A. Pyle
Reg. No. 34,904

WILLIAMS, MORGAN & AMERSON
CUSTOMER NUMBER: 23720
10333 Richmond Dr., Suite 1100
Houston, Texas 77042
(713) 934-7000

Attorney for Applicants

Date: June 28, 2004